

# Exhibit A

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF PENNSYLVANIA

IN RE HERLEY INDUSTRIES INC.  
SECURITIES LITIGATION

Civil Action No.: 06-2596 (JRS)

EXPERT REPORT OF PATRICK CONROY

AUGUST 14, 2009

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## **I. INTRODUCTION AND SUMMARY OF OPINION**

1. On June 15, 2006 Kevin Montoya (“Montoya”) filed a civil complaint against Herley Industries, Inc. (“Herley”) and other named defendants, alleging violations of the Securities Exchange Act of 1934 (the “Exchange Act”).<sup>1</sup> Additional complaints were filed against Defendants between June and August of 2006. On February 5, 2007, Plaintiffs filed the *Consolidated Complaint for Violations of Federal Securities Laws* (the “Complaint”). Plaintiffs in *In re Herley Industries Securities Litigation* represent a putative class consisting of persons and entities who purchased or otherwise acquired shares in Herley Industries, Inc. between October 1, 2001 and June 14, 2006 (the “Alleged Class Period”) and who were allegedly damaged as a result of alleged misstatements and omissions by Herley and its officers and directors (the “Defendants”). These alleged misstatements and omissions relate to allegations that the Defendants submitted inaccurate cost data to the U.S. Government in order to obtain favorable contract terms, resulting in Herley having to pay fines and penalties, incurring increased legal, regulatory and compliance costs, and potentially disrupting its business with the U.S. Government.

2. NERA has been asked by counsel for Herley to review the allegations in the Complaint, and to evaluate the Expert Report Regarding Damages of Scott D. Hakala filed in connection with this matter (the “Hakala Damages Report”), including its alleged damage calculations and its other conclusions.

### **A. Summary of Opinion**

3. Based on documents identified herein, our analysis of publicly available information and information obtained from Herley, we have reached the following conclusions:

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<sup>1</sup> Civil docket for case #: 2:06-cv-02596-JS, IN RE HERLEY INDUSTRIES INC. Retrieved January 30, 2009.

- The direct impact of the allegedly inflated cost data on Herley's reported results during the Alleged Class Period was minimal. Herley's price decline at the end of the Alleged Class Period in June 2006 was the result of consequential effects related to the allegedly inflated cost data, such as fines and penalties imposed by the U.S. Government, related legal costs, and the potential disruption of Herley's business with the U.S. Government.
- Much of the decline in Herley's stock price in June 2006 was the result of the potential disruption of Herley's business with the U.S. Government. These fears eventually proved unwarranted, and much of the decline in Herley's stock price was subsequently reversed. This implies that, had the full extent of the allegations and consequential impact of the allegations on Herley been known at the beginning of the Alleged Class Period, the June 2006 price declines are not representative of what would have happened to Herley's stock price.
- Prior to June 2006, Herley disclosed an increase in legal costs partially due to "a continuing investigation by the U.S. Attorneys' office in Pennsylvania which, inter alia, involves pricing under two contracts with the U.S. Department of Defense relating to voltage control oscillators and a contract relating to powerheads" in its 2005 10-K filed on October 31, 2005. This was the first public disclosure of the alleged fraud, and it was not accompanied by a statistically significant price reaction.
- Dr. Hakala has performed some of the elements of a required event study, but inappropriately excludes certain event dates from his analysis.
- Dr. Hakala's analysis assumes without basis that Defendants should be liable for any temporary movements in Herley's stock price due to the potential disruption of Herley's business with the U.S. Government.
- Taking the above factors into account substantially reduces alleged damage estimates due to the alleged fraud:
  - Dr. Hakala's calculated aggregate alleged damages for the alleged Class Period are \$80.7 million.
  - By correcting Dr. Hakala's event study analysis, and including additional event dates and their associated price reactions in our alleged inflation calculations, we arrive at aggregate alleged damages of \$63.2 million.
  - If we limit our calculations to the actual financial impact of the alleged fraud on Herley's business, alleged damages are between \$9.6 million and \$13.9 million.
  - Assuming that the disclosure of an increase in legal costs in Herley's 10-K filed October 31, 2005, combined with the June 2006 news items, represented a timely disclosure of events related to the allegations, alleged damages are zero.

## **B. National Economic Research Associates, Inc. (“NERA”)**

4. NERA is an international firm that provides economic analysis and advice to corporations, governments, law firms, regulatory agencies, trade associations and international agencies. NERA was established in 1961, and now employs approximately 600 professionals in over 20 offices worldwide. NERA is a leading company in the application of rigorous economic, financial and statistical analysis to securities matters. The securities practice dates from the early 1970s, and employs a research staff of over 150 professionals with economics, finance, accounting, and mathematics degrees. The practice’s clients include major securities exchanges, risk managers, principals requiring valuation services, and parties to litigation and arbitration.

## **C. Patrick Conroy**

5. I am a Vice President of NERA, where I specialize in securities and financial economics. I am a financial economist by training and experience. Currently I am a consultant to financial institutions, corporations, individuals, governments, and not-for-profit institutions in the areas of securities, banking, regulation, and risk management.

6. My curriculum vitae, attached as Exhibit 1, more fully sets forth my qualifications and expertise.

*Exhibit 1. Curriculum Vitae of Patrick Conroy*

## **D. Materials Considered**

7. In the course of performing our evaluation, we have reviewed the documents identified herein, pleadings, tabulations, lists, directories, and other published compilations generally used and relied upon by persons in our field of occupation.

8. The materials considered in preparation of this report are listed in Exhibit 2.

*Exhibit 2. Materials Considered*

## **II. BACKGROUND AND SUMMARY OF ALLEGATIONS**

9. Herley was founded in 1965 for the purpose of designing and manufacturing microwave devices for use in tactical military programs.<sup>2</sup> Since its inception, the company has grown internally and through strategic acquisitions from a component manufacturer to a systems and service provider. Herley's main customers include large defense contractors, such as Northrop Grumman and Lockheed Martin, the U.S. Government, and international corporations and governments. The company's common stock trades on The NASDAQ Global Market under the symbol "HRLY," and had a market capitalization of approximately \$150 million as of September 28, 2001, the day prior to the beginning of the Alleged Class Period.

### **A. Timeline of Events Related to Allegations**

10. On June 6, 2006, Herley issued a press release announcing a criminal indictment by the U.S. Attorney's office for the Eastern District of Pennsylvania alleging that Herley used its "advantage as a sole supplier to systematically gouge the U.S. military."<sup>3</sup> A week later, on June 13, 2006, Herley announced that, in connection with the criminal indictment, the Government had decided to suspend three of Herley's facilities (collectively, the "Herley Facilities") from receiving any new Government contracts. From June 5 through June 15, 2006, Herley's closing stock price declined from \$17.50 to \$11.05.

11. Within four months, on October 13, 2006, an agreement was reached whereby the suspension was lifted. Herley's stock price rose in response to this news, from \$12.52 at market close on October 12, 2006 to \$15.05 at market close on October 13, 2006.

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<sup>2</sup> [http://www.herley.com/index.cfm?act=about\\_history](http://www.herley.com/index.cfm?act=about_history)

<sup>3</sup> "Herley, Chairman Indicted on Fraud Charges," Associated Press Newswires, June 6, 2006.



12. On May 5, 2008, Herley announced the final settlement agreement with the U.S. Government regarding the allegations in the criminal indictment. In response, Herley's stock price rose from \$12.00 at market close on May 2, 2008 to \$14.75 at market close on May 5, 2008.

*Exhibit 3. Daily Closing Price, Trading Volume, and Key Events,  
January 1, 2001 through December 31, 2008*

## **B. Allegation Summary**

13. In connection with these events surrounding Herley's criminal indictment and its aftermath, Plaintiffs allege that "[u]nbeknownst to plaintiffs and the Class, Defendants went to elaborate lengths in contracting with the Government... to submit fraudulent, false and inflated cost data to the Government... secur[ing] Government contracts at price levels far above what Herley would have received had Herley submitted true and accurate cost information." Plaintiffs further allege that these actions "had the direct effect of fraudulently inflating Herley's reported revenues, earnings, and margins, and consequently of inflating the price of Herley's shares," and "exposed Herley to material liabilities – including fines and penalties; disgorgement of illegitimate profits; increased legal, regulatory and compliance costs; and potential and actual loss of further contracts with its largest customer, the Government – of which plaintiffs and the Class were unaware."

14. Plaintiffs further allege that "[d]efendants'... undisclosed and fraudulent business practices allowed Herley to report misleading, false and inflated revenues, income, profits, margins and growth... which formed the basis for the market's doubling the value of... Herley's shares... [and] exposed Herley to undisclosed and highly material liabilities including fines and penalties, disgorgement, increased legal and regulatory costs, and loss of further business with the Government."<sup>4</sup>

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<sup>4</sup> Complaint, paragraphs 103 and 104.

### **III. MARKET MODEL AND EVENT STUDY**

15. We have conducted an event study to determine a market adjusted impact on Herley's stock price of potential alleged disclosures of Herley's alleged fraud. An event study is a statistical technique designed to determine if the stock price changes substantively following the disclosure of potentially material information. If the information that is revealed is material to market participants, then the stock price should change statistically significantly following the release of the information, after controlling for other factors unrelated to the alleged disclosure that could be affecting the stock price at the same time, such as market-wide influences, industry-wide changes or other company-specific events. Information is deemed to be material if the stock price change, controlling for non-disclosure related factors, is of a statistically significant magnitude and thus unlikely to be seen in the presence of random movements with no disclosure of information on that day.

#### **A. The Market Model**

16. To control for market influences on the dates of the potential alleged disclosures, we built a model that measures the relationship between Herley's stock price and the market. That is, we used statistical analyses to measure the historical relationship between the daily changes in Herley's stock price and the day-to-day returns in the stock market generally as well as in Herley's industry.

17. The daily Herley stock return is the natural logarithm of the current day's stock price divided by the previous day's stock price. We used the daily returns on the Russell 2000 Index and the S&P 600 Aerospace & Defense Index to capture the extent to which general market and industry movements might have influenced Herley's stock price. The market model

was estimated from May 10, 2004 to May 9, 2006: the two-year period prior to the first news potentially related to the alleged fraud.<sup>5</sup>

*Exhibit 4. Historical Relationship Between Herley's Stock Price Returns and the Returns of the Russell 2000 Index and the S&P 600 Aerospace and Defense Index Estimation Period: May 10, 2004 – May 9, 2006*

18. This statistical market model allows us to calculate, on any given day, the amount by which Herley's stock price would be expected to change, in the absence of company specific news, given the change in the value of the market indices on that day. For any particular day, we can use the model to estimate the market-adjusted price reaction of Herley's common stock, that is, what proportion of the stock price movement on any day was not driven by factors affecting the market in general, and thus not explained by the model and therefore might be the result of a market reaction to the disclosure of undisclosed information.

19. We then can test whether the unexplained movement on a given day is statistically significant, i.e., whether statistically there is a low enough probability that an aberrant movement at least as large as the one observed would not occur in the absence of something other than chance. A determination that there is less than a 5 percent chance that a movement of that magnitude could have occurred by chance (corresponding to a 95 percent confidence level) is generally accepted as being sufficient to be considered "statistically significant." We have examined the dates that relate to potential disclosures of Herley's alleged fraud according to this criterion.

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<sup>5</sup> Dr. Hakala has calculated a market model using the S&P 600 Small Cap Index and two constructed industry indices instead. Using Dr. Hakala's market model does not lead to substantially different results with respect to market-adjusted price reactions.

## **B. Potential Alleged Disclosures of Herley's True Financial and Operating Condition**

20. Assuming Plaintiff's allegations are true, one would expect that dates on which the Complaint alleges that Herley's stock price fell in response to disclosures related to the alleged fraud to be accompanied by statistically significant negative price reactions. According to Dr. Hakala, there are three events which potentially fit these criteria. We also examine a date during the Alleged Class Period not considered by Dr. Hakala, October 31, 2005, on which Herley filed its Form 10-K with the SEC for the period ended July 31, 2005, and first disclosed that it was under investigation for pricing issues with contracts relating to VCOs and Powerheads. We examine each event, and determine whether it is appropriate to consider it as a disclosure of the alleged fraud.

- On October 31, 2005, Herley filed its Form 10-K with the SEC for the period ended July 31, 2005, stating, in part, an increase in legal costs partially due to "a continuing investigation by the U.S. Attorneys' office in Pennsylvania which, inter alia, involve[d] pricing under two contracts with the U.S. Department of Defense relating to voltage control oscillators and a contract relating to powerheads."
  - The price of Herley's common stock fell from \$16.91 a share on October 31 to \$16.74 on November 1 at market close. On a market-adjusted basis, the price fell by \$0.06, which was statistically insignificant.
  - This event was the first public announcement of potential issues surrounding the U.S. Government's investigation into contracts relating to VCOs and Powerheads, and we considered it in our analysis. The price reaction to this news item was statistically insignificant, so we conclude that investors did not consider this news to be material to Herley's stock price.
- On June 6, 2006, an AP story stated, "Herley Industries Inc. (HRLY) and Lee N. Blatt, the Lancaster-based company's founder and board chairman, allegedly reaped profits of up to 300% on more than \$3.9 million in sales of electronic components for which it was the only supplier, according to [a] grand jury indictment."<sup>6</sup>
  - The price of Herley common stock fell from \$17.50 a share on June 5 to \$15.04 on June 7 at market close. On a market-adjusted basis, the price fell by \$2.31, which was statistically significant at the 5 percent level.

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<sup>6</sup> "Military Contractor Herley, Chmn Indicted on Price Gouging," *Associated Press*, June 6, 2006.

- As this event effectively discloses Herley’s criminal indictment, we include it in our analysis.
- On June 13, 2006, prior to market close, Herley issued a press release announcing that its manufacturing operations in Lancaster, Pennsylvania, Woburn, Massachusetts, and Farmingdale, New York had been suspended from receiving new contract awards from the U.S. government.<sup>7</sup>
  - The price of Herley common stock fell from \$15.25 a share on June 12 to \$9.21 on June 14 at market close. On a market-adjusted basis, the price fell by \$5.96, which was statistically significant at the 5 percent level.
  - As this event discloses the temporary suspension of Herley’s Government contracts in connection with the criminal indictment, we include it in our analysis.
- On June 20, 2006, Herley announced that it received a NASDAQ Staff Determination Letter indicating it “was informed that its securities w[ould] be delisted from The NASDAQ Stock Market at the opening of business on June 27, 2006 unless it request[ed] a hearing,” because Herley’s auditor was unable to review its SEC Form 10-Q prior to filing.<sup>8</sup> The company stated that it would be requesting a hearing which “automatically stays the delisting of the Company’s securities pending the hearing and the decision of the Nasdaq Listing Qualification Panel.”<sup>9</sup>
  - The price of Herley common stock fell from \$10.68 a share on June 19 to \$9.94 on June 20 at market close. On a market-adjusted basis, the price fell by \$0.69, which was statistically significant at the 5 percent level.
  - Dr. Hakala includes this date in his analysis, claiming “this event was directly related to the alleged fraud.”<sup>10</sup>
  - The delisting never actually occurred. According to Herley’s 10Q-A filed on September 14, 2006, the company eventually met listing requirements and resolved the issue. We conservatively include this price reaction in our analysis.

<sup>7</sup> “Three of Nine Herley Manufacturing Facilities Suspended by the U.S. Federal Government,” Herley Press Release, June 13, 2006.

<sup>8</sup> “Herley Industries, Inc. Receives NASDAQ Staff Determination Letter; Requests Hearing in Accordance With Marketplace Rules,” Herley Press Release, June 20, 2006.

<sup>9</sup> Herley SEC Form 8-K filed June 20, 2006.

<sup>10</sup> Expert Report of Scott D. Hakala, Regarding Damages, page 32.

21. Exhibit 5 summarizes the event dates alleged by Hakala as disclosures of the alleged fraud, as well as an additional date, October 31, 2005 (on which Herley filed its Form 10-K with the SEC for the period ended July 31, 2005, and first disclosed that it was under investigation for pricing issues with contracts relating to VCOs and Powerheads), and the market-adjusted price reactions to each.

*Exhibit 5. Summary of Market-Adjusted Price Reactions on Alleged Disclosure Dates*

**C. Evidence of Price Recovery From Fear of Lost Government Contracts**

22. There were three dates after the Alleged Class Period on which Herley's stock exhibited a statistically significant recovery as Herley announced a share repurchase program and the issues above were resolved. These dates suggest that the decline in Herley's stock price during June of 2006 was, in retrospect, overdone and that the actual impact of the allegations was much smaller than initially believed.

- On June 15, 2006, Herley announced that it "believe[d its] common stock was undervalued... [and that it would] begin the buyback... under a previously approved... plan."<sup>11</sup> Herley also clarified some issues surrounding the criminal indictment and suspension from Government contracts in its 10Q filed after market close on June 14, 2006.
- The price of Herley common stock rose from \$9.21 a share on June 14 to \$11.05 on June 15 at market close. On a market-adjusted basis, price rose by \$1.55, which was statistically significant at the 5 percent level.
- Dr. Hakala cites three reasons for the price increase on this day in his report:

Late on June 14, 2006, Herley issued its earnings for the third fiscal quarter. The results were as previously indicated and taken as a relief that the earnings shortfall announced late on June 4 was due, in part, to one-time catch-up or start-up items. The announcement of the intention of the Company to buy back shares also lifted the share price. Additionally, the Company clarified the issued with respect to the government indictment and reasserted Herley's position. Thus, a substantial portion of the news the [sic] affected Herley's share price on June 15,

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<sup>11</sup> "Herley Announces Stock Buyback," Herley Press Release, June 15, 2006.



2006 was not relevant, but some portion was relevant. In order to be conservative, I chose to assume that 50% of this event was relevant at most. This results in a \$0.76 positive relevant effect, approximately half of the dollar decline on the earnings warning on June 5, 2006.<sup>12</sup>

- Dr. Hakala's intimation that earnings reported in Herley's 10Q filing after market hours on June 14, 2006 caused the share price to rise "in part, to one-time catch-up or start-up items" on June 15<sup>th</sup> is incorrect. Equity analyst reports released on June 15, 2006 by Stephens Inc. and Bear Stearns & Co., Inc. did not mention any relief in connection with one-time catch-up or start-up items. Instead, the Stephens Inc. analyst stated that earnings were "in line with our recently downwardly revised expectation,"<sup>13</sup> while the Bear Stearns analyst stated that Herley "pretty much delivered on what it recently said it would."<sup>14</sup> This implies that the rise in Herley's stock price on June 15 was not a result of Herley's earnings; as such a rise would only be expected if earnings exceeded expectations, which they did not.
- Therefore, the rise in Herley's stock price can be fully attributed to Herley's clarification of the matters surrounding the indictment and suspension, and the announcement that Herley would begin repurchasing shares under a previously authorized plan. The positive reaction to both of these items signals that the market believed Herley's shares were undervalued as a result of the price drops on the news of the indictment and the suspension.
- Accordingly, we consider the full positive price reaction in our analysis as being indicative of a recovery from earlier price declines in response to news of Herley's indictment and suspension from Government contracts.
- On October 13, 2006, Herley reached an agreement with the U.S. Government which lifted the June 13 suspension. Herley agreed to sever ties with its former Chairman Lee Blatt.<sup>15</sup>
- The price of Herley common stock rose from \$12.52 a share on October 12 to \$15.05 on October 13 at market close. On a market-adjusted basis, the price rose by \$2.49, which was statistically significant at the 5 percent level.
- Dr. Hakala considers this event date in his analysis as being related to the allegations, and considers it in his analysis.

<sup>12</sup> Expert Report of Scott D. Hakala: Regarding Damages, paragraph 68.

<sup>13</sup> "Herley Industries Inc. F3Q06 in Line With Pre-Announcement." Stephens Inc. June 15, 2006

<sup>14</sup> "HRLY Caps Off a Stunning 45 Day Slide." Bear Stearns. June 15, 2006.

<sup>15</sup> "Herley Reaches Administrative Agreement With Department of Defense," Company Press Release, October 13, 2006.

- This date also suggests that the initial price declines in reaction to earlier news of the indictment and suspension from government contracts was overdone.
- On May 5, 2008, Herley settled the indictment charges with the U.S. government by paying a \$3.5 million fine and \$6 million for release from all existing criminal and civil claims.<sup>16</sup> Herley pled guilty to two counts of obstructing an audit relating to the Powerheads, while all other counts in the indictment were withdrawn in their entirety.
- The price of Herley common stock rose from \$12.00 a share on May 2 to \$14.21 on May 6 at market close. On a market-adjusted basis, the price rose by \$2.18, which was statistically significant at the 5 percent level.
- Dr. Hakala did not consider this date in his event study analysis.
- This event date is related to the allegations, and suggests that the initial price declines in reaction to earlier news of the indictment and suspension from government contracts was overdone.

23. Exhibit 6 summarizes the event dates with positive price reactions indicated by Plaintiffs as being related to the alleged fraud and the market-adjusted price reactions to each. It also includes the May 5, 2008 event date, which we have determined is related to the allegations.

*Exhibit 6. Summary of Market-Adjusted Price Reactions on  
Recovery Dates*

#### **IV. LOSS CAUSATION**

24. Both the Complaint and Dr. Hakala imply that not only did the disclosure of the allegations have an impact on Herley's stock price in June of 2006, but that Defendants' actions actually caused Herley's stock price to more than double in the early part of the Alleged Class Period. The evidence suggests that this is an unlikely scenario. The contracts at issue involved Powerheads and VCOs totaling approximately \$3.6 million in revenue.<sup>17</sup> Considering that a stock price of \$15 per share at the beginning of the Alleged Class Period implies a market

<sup>16</sup> "Herley Announces Settlement Agreement with U.S. Government," Company Press Release, May 5, 2008.

<sup>17</sup> See paragraph 86 on pages 23 and 24 of the Superseding Indictment.



capitalization of more than \$150 million<sup>18</sup>, any claim that the actual conduct at issue in the criminal indictment could have doubled Herley's stock price seems far fetched.

25. Instead, Plaintiffs and Dr. Hakala may be referring to the consequential effect of the disclosure of the alleged fraud, which include the temporary suspension of Government contracts at three of Herley's production facilities, increased legal and compliance costs, and the severance paid to Blatt. However, these items represent costs incurred after the Alleged Class Period in connection with Herley's dispute with the U.S. Government, and could not have inflated investor's perceptions of Herley's prospects and increased Herley's stock price at the beginning of the Alleged Class Period.

#### **A. Much of the June 2006 Decline in Herley's Stock Price Was Reversed**

26. The relatively small dollar impact of the alleged fraud implied by the calculations above are consistent with the fact that Herley's stock price substantially recovered from the June 2006 price declines when Herley announced the lifting of suspensions of contracts with the U.S. Government on October 13, 2006, and when it settled the criminal suit entirely on May 5, 2008. The net negative impact of the June 2006 price declines and later reversals is \$2.73, as shown in Exhibit 7.

*Exhibit 7. Net Price Reactions to Events Potentially Related to the  
Alleged Fraud, Including Resolution of Criminal Suit*

27. Given that Herley's stock price recovered upon the resolution of the criminal investigation, and given that the net impact of all related alleged disclosures was only \$2.73, a full and complete disclosure of the alleged fraud at the beginning of the Alleged Class Period would have been much lower than the declines in Herley's stock price in June 2006.

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<sup>18</sup> At the beginning of the Alleged Class Period Herley had approximately 10.6 million shares outstanding. This implies a market capitalization of \$154 million = 10.6 million shares \* \$14.56 per share on the trading day prior to the start of the Alleged Class Period.

## **B. The Actual Impact of the Alleged Fraud on Herley's Reported Financial Results During the Alleged Class Period Was Minimal**

28. The magnitude of the revenues associated with Herley's VCO and Powerhead contracts at issue were limited to approximately \$3.6 million.<sup>19</sup> As the U.S. Government elected to withdraw its allegations in connection with the VCO contracts, it is appropriate to omit them from this figure. Revenues associated with the Powerhead contracts were limited to approximately \$3.2 million.<sup>20</sup> If we assume that Herley should have produced the Powerheads without charging the U.S. Government (an unreasonable but conservative assumption), the maximum financial impact of the alleged fraud on Herley's stock price was approximately \$0.30 per share.<sup>21</sup> This figure ignores the impact of taxation, Herley's alleged overcharging of the U.S. Government, and a reasonable gross margin. If we assume a 35 percent tax rate and that Herley overstated its costs in such a way as to earn the full \$3.2 million in revenues as profits (an unreasonable but conservative assumption), and further assume that Herley should have earned gross margin of 10 percent,<sup>22</sup> the \$0.30 per share figure would be reduced to about \$0.18 per share.<sup>23</sup>

## **C. Consequential Impact of the Alleged Fraud**

29. The minimal impact of the alleged fraud is inconsistent with the large price declines in Herley's stock price in June 2006. As suggested by Plaintiffs and Dr. Hakala, the consequential impact of the U.S. Government's allegations in the criminal indictment caused the vast majority of Herley's price decline over this period. The \$3.5 million fine agreed upon by Herley and the U.S. Government on May 5, 2008 in connection with the contracts at issue

<sup>19</sup> See paragraph 86 on pages 23 and 24 of the Superseding Indictment.

<sup>20</sup> Ibid.

<sup>21</sup> \$3.2 million divided by the approximately 10.6 million shares outstanding at the beginning of the class period.

<sup>22</sup> Herley's gross margin (one minus cost of products sold divided by net sales) was 34.9 percent in 2004 and 29.7 percent in 2005.

<sup>23</sup>  $\$0.18 = \$3.2 \text{ million} \times (1 - 35 \text{ percent tax rate}) \times (1 - 10 \text{ percent gross margin}) \div 10.6 \text{ million shares outstanding at the beginning of the class period.}$

was a one-time occurrence, the extent of its impact is limited to, at most, approximately \$0.19 on a per-share basis.<sup>24</sup> If the additional \$6 million settlement paid by Herley and the \$3.5 million fine are combined, the total \$9.5 million payment would result in approximately \$0.41 in inflation after tax on a per-share basis.<sup>25</sup>

30. Regarding any loss of revenues due to the temporary suspension of contracts with the U.S. Government, evidence suggests that Herley permanently lost at most \$3 million in government contracts, and other effects were limited to delays in revenues as Herley waited for the suspension to be lifted. In a conference call with analysts on November 2, 2006, Herley CEO Myron Levy stated, "What has the four month suspension cost us in lost business? We believe less than \$3 million could have been lost. And last year our revenues were over \$176 million. The lost business is primarily a small part of our overall business where we have competitors." Equity analysts agreed that the lost business was minimal. In an October 16, 2006 report titled, "DoD Gives Herley the Green Light," Stephens Inc. wrote, "We doubt that a significant amount of F07 business was permanently lost over the suspension period."

31. The remaining effects of the suspension on Herley's revenues manifested in shifted sales. In the same November 2, 2006 conference call with analysts, Mr. Levy stated:

I know that all of our major customers -- the major primes -- were holding up orders pending approval by the suspending authority. What happened in some cases, that approval was received late in September and of course by October 12 we were removed from the excluded list. And orders didn't start flowing at that point which it had to go through -- once again -- state department, also security.

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<sup>24</sup> After discounting to 6/1/2006, the \$3.5 million is equal to approximately \$2.83 million. \$2.83 million divided by approximately 14.65 million shares outstanding at 6/1/2006 equals approximately \$0.19 per share. It should be further noted that the fine and settlement paid by Herley were completely unrelated to Herley's alleged ill-gotten gains as a result of the alleged misrepresentation of costs.

<sup>25</sup> After deducting 35 percent in taxes and discounting to 6/1/2006, the \$6 million settlement is equal to approximately \$3.16 million. \$3.16 million divided by approximately 14.65 million shares equals approximately \$0.22 per share. The \$0.19 per share impact of the \$3.5 million fine and the \$0.22 impact of the \$6 million settlement add to a total \$0.41 per share impact. See Exhibit 9.

Then, responding to a question from a Bear Stearns analyst, Levy said, “To the best of my knowledge, no customer has attempted to re-qualify [a new supplier on any of the programs we’re on] at all.” Herley did not suffer a significant loss of business as a result of the suspension, and by the fourth quarter of Herley’s 2007 fiscal year the effects of the suspension were coming to a close. A June 7, 2007 Bear Stearns analyst report titled “An Inflection Point?” stated, “We were... pleasantly surprised by Herley’s strong book to bill rate of 1.31x, likely due to the order bump from the lifting of last year’s suspension,” indicating that the deferred orders were flowing into Herley’s financials.

32. The \$3 million figure cited by Myron Levy can be used as a conservative estimate for the maximum amount of revenue Herley may have lost due to the suspension. We do not know the exact amount of, and the extent to which, Herley’s revenues in 2006 were shifted into future periods. NERA has therefore assumed that Herley’s entire revenue shortfalls in 2006 and 2007 were due to the shifted revenues at the three facilities at issue. NERA has also assumed that revenue shifted from 2006 and 2007 were shifted forward by a full year – a conservative figure given that the suspension only lasted approximately four months. We use Herley’s cost of capital to estimate the valuation impact of shifting the 2006 and 2007 amounts forward by one year.

33. After performing the relevant calculations, we estimate that after adjusting for taxes and accounting for the fact that not all lost or shifted revenue translates into net income, the valuation impact of the suspension was approximately \$1.28 million, or \$0.09 on a per-share basis around June 1, 2006.<sup>26</sup>

*Exhibit 8. Estimating the Loss to Net Income Caused by Lost or Shifted Revenue*

34. Other costs associated with the alleged fraud include co-founder and former Chairman Lee Blatt’s severance package, legal costs associated with the DoJ action against

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<sup>26</sup> Using the approximately 14.65 million shares outstanding at 6/5/2006.

Herley, and an increase in audit fees triggered by the resignation of Herley's auditor, BDO Seidman.

35. In October, 2006, in order to lift the suspension on its facilities, Herley agreed to terminate the employment of Lee Blatt. Because Mr. Blatt had not been convicted of any offense that would be cause for dismissal, Herley was forced to terminate Mr. Blatt's contract without cause, triggering a severance package that was worth about \$8.914 million<sup>27</sup> in October 2006. After adjusting for taxes, this settlement cost Herley approximately \$0.40<sup>28</sup> on a per-share basis around June 1, 2006.

36. Herley also incurred legal costs related to the criminal indictment. These costs amounted to about \$11.36 million. Of this \$11.36 million, Herley may ultimately only be responsible for approximately \$1.36 million if Herley collects \$10 million in insurance money associated with legal costs related to the government's allegations.<sup>29</sup> On a per share basis, the \$11.36 and \$1.36 million amount to approximately \$0.50 and \$0.06 after taxes, respectively.<sup>30</sup>

37. Finally, in its 10-Q filed December 8, 2006, Herley stated that significant changes during the quarter included "an increase in audit fees of \$420,000 due to the three year audit scope that was required subsequent to the resignation of the company's prior auditors." Assuming that the resignation of the company's prior auditors is related to the alleged fraud, and Herley is found liable for an increase in costs associated with the resignation, this \$420,000 charge is equal to about \$0.02 on a per share basis after adjusting for taxes.<sup>31</sup>

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<sup>27</sup> Herley SEC Form 10Q filed December 8, 2006. The \$8.914 million figure is directly specified in this filing, and discounting for the time value of money. The face value of all payments, including future payments to Mr. Blatt as of this filing was actually \$9.462 million.

<sup>28</sup> \$0.40 equals \$8.914 million times (1 – 35 percent tax rate) divided by 14.65 million shares outstanding.

<sup>29</sup> Counsel has informed us that in connection with the criminal indictment, an insurance policy in the amount of \$10 million for associated legal costs may be payable to Herley.

<sup>30</sup> \$0.50 and \$0.06 equal \$11.36 million and \$1.36 million times (1 – 35 percent tax rate) divided by 14.65 million shares outstanding, respectively.

<sup>31</sup> \$0.02 equals \$420,000 times (1 – 35 percent tax rate) divided by 14.65 million shares outstanding.

38. Adding together the impact of the government fine and settlement, the effect of lost and deferred revenue, the Blatt severance package, legal costs, and the increase in audit fees, the entire impact of the alleged fraud is approximately \$1.41 per share, or \$0.97 per share if Herley is able to recover its insurance for legal costs. See Exhibit 9 for a summary of the above components.

*Exhibit 9. Summary of Direct Financial Impact of Allegations in the Criminal Suit*

## **V. ESTIMATE OF ALLEGED DAMAGES ASSUMING LIABILITY**

39. The calculation of Section 10(b) damages (assuming liability) begins with a measurement of alleged stock price inflation at purchase and sale for each transaction by each shareholder. For shares bought and sold during the Class Period, the maximum alleged (but not necessarily the actual) damage per share is equal to the difference between the alleged stock price inflation when the share was purchased and when it was sold. For shares bought during the Class Period and held until the end of the Class Period, the maximum alleged (but not necessarily the actual) damage per share is equal to the alleged stock price inflation at the time of purchase.

40. There are two important limitations on damages.

41. First, the U.S. Supreme Court decision in *Dura v. Broudo*<sup>32</sup> states as follows: “[t]he securities statutes seek to maintain public confidence in the marketplace. They do so by deterring fraud, in part, through the availability of private securities fraud actions. But the statutes make these latter actions available, not to provide investors with broad insurance against market losses, but to protect them against those economic losses that misrepresentations actually cause.” The *Dura* decision addresses loss causation from the standpoint of liability, but by implication, damages should also be calculated in a manner consistent with the Supreme Court’s conclusions. Thus, *Dura* makes clear that damages cannot be larger than the dollar value lost due to the disclosure of the alleged misrepresentation or omission.

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<sup>32</sup> *Dura Pharmaceuticals, Inc. v. Broudo*, 544 U.S. 336 (2005).



42. Second, the Section 10(b) damage per share calculation also takes into account the cap imposed by the 90-day “bounceback” rule under the Private Securities Litigation Reform Act of 1995. Under this rule, the alleged damage per share for a share retained through a disclosure is limited to the purchase price minus the average “bounceback” price of the stock through the date of sale if sold within 90 days of the disclosure or the average price over the 90 days following the disclosure if the stock is held for 90 days following the disclosure.<sup>33</sup>

43. Therefore, for each share purchase and sale date combination throughout the Class Period, we first apply the *Dura* cap to our initial maximum damage per share measure and then use either that capped damage per share or the number derived from the 90 day “bounceback” cap, whichever is less.

#### **A. NERA’s Multi-Sector, Multi-Trader Model**

44. Next, we calculate an aggregate damage estimate by multiplying the damage per share for each share purchased during the Class Period by the number of shares damaged. The number of shares damaged is estimated using NERA’s multi-sector, multi-trader model.<sup>34</sup> Briefly, this model examines daily trading volume, shares outstanding, short interest, insider holdings and transactions (included in insider holdings and transactions in this case are shares owned by managing directors of Herley who are not named as defendants in this case), and quarterly institutional trading to estimate the purchase dates and holding periods of stock transactions by identified and unidentified investors over a given period. Identified investors include insiders and institutions. Insiders are not included in the damage calculation, while institutional quarterly holdings are used to infer daily purchases and sales by institutions. The balance of the daily volume and holdings, which are unaccounted for by the insider and institutional transaction data, are split into purchases and sales by intraday-, high- and low-activity investors. Shares purchased and sold within the Class Period, as well as shares

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<sup>33</sup> Private Securities Litigation Reform Act of 1995, Section 21D(e).

<sup>34</sup> See “Best-Fit Estimation of Damaged Volume in Shareholder Class Actions: The Multi-Sector, Multi-Trader Model of Investor Behavior,” NERA (2000)

purchased in the Class Period and held after the end of the Class Period are estimated accordingly. These estimates use the actual volume, shares outstanding and short interest of Herley common stock and estimates of intraday trading, relative trading frequency of high- and low-frequency traders and relative holdings of high- and low-frequency traders based on actual trading data from millions of trades in other common stocks. For institutional holders, damages are estimated netting gains from the alleged fraud from losses from the alleged fraud. The percent reduction in damages from netting gains against losses is also used to estimate the reduction in damages as a result of gains from the alleged fraud for unidentified investors.

### **B. An Examination of Dr. Hakala's Calculation of Alleged Damages**

45. Dr. Hakala's calculation of alleged damages incorporates the five event dates he considers related to the alleged fraud. Using the price reactions associated with these event dates, he constructs an alleged inflation series representing the degree to which Herley's stock price was allegedly inflated during the Alleged Class Period. Using his approximation of NERA's Multi-Sector, Multi-Trader model, Dr. Hakala calculates an alleged damage estimate of \$80.7 million.<sup>35</sup>

46. As discussed in the event study section of this report, Dr. Hakala's list of event dates is incomplete. Using a corrected list of event dates, and assuming that Herley is found liable for the full initial price reactions to the criminal indictment and temporary suspension of Government contracts in June 2006, NERA has calculated an alternative alleged inflation series.

*Exhibit 10. Alleged Inflation Chart Using NERA's List of Event Dates  
and Price Reactions*

47. Using this inflation series in conjunction with NERA's Multi-Sector, Multi-Trader model, we arrive at an alleged damage figure of \$63.2 million.

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<sup>35</sup> Expert Report of Scott D. Hakala, Regarding Damages.



48. Dr. Hakala's analysis also ignores certain complicating factors with liability issues in this case. This action involves a criminal suit against Herley that has been settled, and which in retrospect did not significantly impact Herley's business. At the time of the disclosure of the criminal suit and the temporary suspension of Herley's business with the U.S. Government in June 2006, Herley's stock price suffered declines which were subsequently largely reversed. Dr. Hakala ignores the full potential implications of this reversal. He assumes without basis that Herley is liable for the temporary decline in Herley's stock price associated with the temporary suspension of new contracts with the U.S. Government.

**C. Alleged Damages Assuming Liability Only for Actual Financial Impact on Herley's Business**

49. As was explained in Section V. C. of this report, because the suspension from new contracts with the U.S. Government was eventually lifted, the net financial impact on Herley's business of all issues potentially related to Herley's criminal indictment in June 2006 can be directly measured. These issues included fines and penalties paid to the U.S. Government, increased legal costs, loss or shifting of any revenues, severance payments to then Herley Chairman Lee N. Blatt, and any increased audit costs borne by Herley. These issues were calculated as impacting Herley's stock price by an amount ranging from \$0.97 to \$1.41 per share, depending on the outcome of disputes between Herley and its insurer.

50. NERA has calculated an inflation series using the actual financial impact of the allegations, which implies that alleged inflation during the Alleged Class Period would range from \$0.97 to \$1.41.

*Exhibit 11. Alleged Inflation Chart Using Direct Financial Impact of Allegations*

51. Using this inflation series in conjunction with NERA's Multi-Sector, Multi-Trader model, we arrive at alleged damage figures ranging from \$9.6 to \$13.9 million.

*Exhibit 12. Summary of Alleged Damages Assuming Liability*

53. Assuming that Herley's announcement that it experienced an increase in legal costs for the fiscal year ended July 31, 2005 due to "a continuing investigation by the U.S. Attorneys' office in Pennsylvania which, inter alia, involve[d] pricing under two contracts with the U.S. Department of Defense relating to voltage control oscillators and a contract relating to powerheads" in its 10-K filed for the fiscal year ended July 31, 2005 was timely, and assuming also that Herley's subsequent announcements in June 2006 of its criminal indictment and temporary suspension from U.S. Government contracts were also timely, alleged damages are zero.

54. Assuming that Herley did not disclose news related to its criminal indictment and suspension from U.S. Government contracts in a timely fashion the direct financial impact of the allegations is much smaller than indicated by Dr. Hakala. Had the criminal indictment and suspension, along with the actual resolution of these matters, been disclosed at the beginning of the Alleged Class Period, Herley's stock price would likely not have declined by the amounts it did in June 2006. However, Dr. Hakala assumes that Herley is liable for all movements in Herley's stock price related to the criminal suit, without considering any alleged damage scenarios which include only the eventual actual financial impact on Herley. Dr. Hakala has also omitted certain event dates, and only partially considered others, in constructing his alleged inflation series for Herley.

55. NERA has considered additional event dates related to the alleged fraud. Incorporating these additional dates but still using Dr. Hakala's methodology, NERA has arrived at a lower alleged damage calculation of \$63.2 million. If we consider only the actual

financial impact of the allegations on Herley, alleged damages are between \$9.6 million and \$13.9 million.

## VII. MISCELLANEOUS

56. Our work is ongoing and our opinions are subject to revision based on new information, which subsequently may be provided to or obtained by us.

57. NERA is being compensated for its time and out-of-pocket expenses at standard billing rates. Dr. Conroy's current hourly rate is \$525. The hourly rates charged for other NERA personnel range from \$195 to \$635 per hour. NERA's compensation is not contingent on the outcome of this litigation.

Respectfully submitted,

*[Handwritten signature]*

Patrick Conroy